

Claim Listing

1. (previously presented) A network device comprising:
 - a processor to send and receive control and message traffic between the network device and other devices in a network;
 - a first port to allow the network device to communicate with a first network, the first network being a circuit-switched network;
 - a second port to allow the network device to communicate with a second network, the second network being a packet-switch network;
 - a transcompression element to route in-band compression renegotiation messages and to transmit in-band renegotiation indication messages between the first and second networks, and
 - wherein the processor is configured to monitor message traffic for in-band compression renegotiation messages during periods of compatible compression and decompression parameters.
2. (original) The network device of claim 1, the transcompression element further comprising an outgoing compressor and an incoming decompressor.
3. (previously presented) The network device of claim 1 further comprising a gateway between a public switched telephone network and a packet-switched network.
4. (original) The network device of claim 1, the message traffic further comprising messages in accordance with International Telecommunications Union standard V.150.0.
5. (original) The network device of claim 1, the transcompression element to transmit renegotiation confirmation messages further comprising a transcompression element to transmit renegotiation confirmation messages in accordance with International Telecommunication standard V.44.
6. (original) The network device of claim 1, the processor further to issue connection messages including an in-band renegotiation capability indicator.

7. (canceled)

8. (previously presented) A method of controlling compression in a network, comprising:
receiving an in-band indication of compression renegotiation at a first network device;
and

transmitting an indication of compression renegotiation acknowledgement to a
compressor element on a second network device; and

monitoring message traffic for in-band compression renegotiation messages during
periods of compatible compression and decompression parameters.

9. (original) The method of claim 8 receiving a compression renegotiation message further
comprising receiving an in-band renegotiation message in accordance with International
Telecommunication Union standard V.44 and transmitting an indication of compression
renegotiation further comprising transmitting a compression renegotiation indicator..

10. (original) The method of claim 8 receiving an indicator of compression renegotiation
further comprising receiving a compression renegotiation indicator and transmitting an indicator
of compression renegotiation acknowledgement further comprising transmitting a compression
confirmation message in accordance with International Telecommunications Union standard
V.44.

11. (previously presented) A method of controlling compression in a network, comprising:
determining if a compression method for outgoing data is compatible with a
decompression method for incoming data;

if the compression method and the decompression methods are compatible, transmitting
incoming data as outgoing data without compression or decompression;

monitoring message traffic for any in-band indications of compression renegotiation
during periods of compatible compression and decompression parameters; and

if an in-band compression renegotiation message is received, determining if the in-band renegotiation message will result in incompatibility between the compression and decompression methods.

12. (original) The method of claim 11, the method comprising performing transcompression if an incompatibility does result.

13. (original) The method of claim 11, the method comprising:
determining that the compression method and the decompression methods are incompatible;
performing transcompression on incoming data to transmit it as outgoing data;
receiving an indication of compression renegotiation;
and determining the compression renegotiation will result in compatible compression and decompression.

14. (original) The method of claim 11, wherein the compression method is one selected from the group comprising: V.44, V.42bis and MNP5 compression.

15. (original) The method of claim 12, wherein the compression method is one selected from the group comprising: V.44, V.42bis and MNP5.

16. (previously presented) The method of claim 11, monitoring message traffic further comprising monitoring simple packet relay transport (SPRT) messages between gateways in a packet-switched network.

17. (original) A method of communicating in a data network, comprising:
generating a connect message;
including an in-band renegotiation capability advertisement in the connect message; and
transmitting the connect message.

18. (original) The method of claim 17, the in-band renegotiation capability further comprising a V.44 in-band renegotiation message.
19. (original) The method of claim 17, transmitting a connect message further comprises transmitting a connect message from a first gateway to a second gateway.
20. (previously presented) An article of computer-readable media containing instructions that, when executed, cause the computer to:
- receive an in-band indication of compression renegotiation at a decompressor on a first network device; and
 - transmit an indication of compression renegotiation acknowledgement to a compressor element on a second network device; and
 - monitoring message traffic for in-band compression renegotiation messages during periods of compatible compression and decompression parameters.
21. (previously presented) The article of claim 20, the instructions, when executed, causing the computer to receive a compression renegotiation message further cause the machine to receive an in-band renegotiation message in accordance with International Telecommunication Union standard V.44 and the instructions, when executed, causing the machine to transmit an indication of compression renegotiation further cause the machine to transmit a compression renegotiation indicator.
22. (previously presented) The article of claim 20, the instructions, when executed, causing the computer to receive an indicator of compression renegotiation further cause the machine to receive a compression renegotiation indicator and the instructions, when executed, causing the machine to transmit an indicator of compression renegotiation acknowledgement further cause the machine to transmit a compression confirmation message in accordance with International Telecommunications standard V.44.
23. (previously presented) An article of computer-readable media containing instructions that, when executed, cause the computer to:

determine if a compression method for outgoing data is compatible with a decompression method for incoming data;

if the compression method and the decompression methods are compatible, transmit incoming data as outgoing data without compression or decompression;

monitor message traffic for any in-band indications of compression renegotiation during periods of compatible compression and decompression parameters; and

if an in-band indication of compression renegotiation message is received, determine if renegotiation will result in incompatibility between the compression and decompression methods.

24. (previously presented) The article of claim 23, the instructions further causing the computer to perform transcompression if an incompatibility does result.

25. (previously presented) The article of claim 23, the instructions further causing the computer to

determine that the compression method and the decompression methods are incompatible;

perform transcompression on incoming data to transmit it as outgoing data;

receive a compression renegotiation message;

and determine the compression renegotiation will result in compatible compression and decompression.

26. (previously presented) An article of computer-readable media containing instructions that, when executed, cause the computer to:

generate a connect message;

include an in-band renegotiation capability advertisement in the connect message; and

transmit the connect message.

27. (previously presented) A network device comprising:

a means for controlling message traffic between the network device and other devices in a network;

a means for allowing the network device to send and receive the message traffic;
a means for receiving in-band compression renegotiation messages and to transmit renegotiation confirmation messages; and
a means for monitoring message traffic for in-band compression renegotiation messages during periods of compatible compression and decompression parameters.

28. (original) The network device of claim 27 the means for receiving further comprising an outgoing compressor and an incoming decompressor.

29. (previously presented) The network device of claim 27 further comprising a gateway between a public switched telephone network and a packet-switched network.

30. (original) The network device of claim 27 the message traffic further comprising messages in accordance with International Telecommunications Union standard V.150.0.